HABS NO. MA-1249-I

CAMP EDWARDS, BUILDING T-1369
(MOTOR REPAIR SHOP)
Camp Edwards
Bourne vicinity
Barnstable County
Massachusetts

HABS MASS 1-BOURN, 1-I-

#### PHOTOGRAPHS AND

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Department of the Interior
Washington, D.C. 20013-7127

HABS MASS, 1-BOUR.V, 1-I-

### HISTORIC AMERICAN BUILDINGS SURVEY

# CAMP EDWARDS, BUILDING T-1369 (MOTOR REPAIR SHOP) HABS NO. MA-1290-1 1240-T

Location:

Building T-1369 is located approximately 100' due south of Beaman road in Block 13 within the south quarter of the Camp Edwards square cantonment, in Barnstable County, Bourne vicinity, Massachusetts.<sup>1</sup>

U.S.G.S. Special Map, series V814SCPEDWARDS, 1977, (1200-I300 blocks), Zone 19, Universal Transverse Mercator Coordinates: SW corner -370440E 4612520N, NW corner -370580E 4612880N, NE corner 370880E 4612700N, SE corner -370740E 4612360N.

Present Owner:

Commonwealth of Massachusetts, leased to Department of the Army and Massachusetts Army National Guard.

Original Use:

Motor Repair Shop Type SP-2.

Present Use:

Motor Vehicle Repair Shop

Significance:

Building T-1369 is significant as a relatively unmodified representative of a 700-series Motor Repair Shop.<sup>2</sup> It represents one of thirty 700-series SP-2 Motor Repair Shop buildings constructed as part of the original 1940 Camp Edwards cantonment and is one of 112 remaining World War II structures in the 1200-1300 blocks of the cantonment.

#### PART I. HISTORICAL INFORMATION:

#### A. Physical History:

- 1. Date of Erection: Construction of Building T-1369 was begun at the same time as the entire Camp Edwards World War II cantonment, on September 12, 1940, and all essential facilities were completed by December 1, 1940.<sup>3</sup>
- 2. Architect: Col. Charles D. Hartman (later Brigadier General) Quartermaster Corps, U.S. Army, supervised the production and revision of the 1940, 700-series plans that were used in the construction of Building T-1369. The Constructing Quartermasters at Camp Edwards during the construction of Building T-1369 were Maj. Harold L. Algeo, (C.E. Res.), Sept. 11, 1940 to Nov. 12, 1940; Capt. Carl M. Patee (QMC), Nov. 11 to Jan. 30, 1941; and Capt. Fred E. Robbins (Inf. Res), Jan. 30, 1941, to completion. The plans were used and modified at Camp Edwards by the architectural-engineering firm of Charles T. Main Inc. of Boston, Massachusetts.

# CAMP EDWARDS, BUILDING T-1369 (MOTOR REPAIR SHOP) HABS NO. MA-1290-I (page 2)

- 3. Original and subsequent owners: In 1935, the Massachusetts State Legislature established the Massachusetts Military Reservation on Cape Cod as a training area for the National Guard. The Department of the Army entered a 99-year lease with the Commonwealth of Massachusetts and developed the camp into a division training area in 1940. In 1953, a portion of the camp was transferred to the Department of the Air Force for construction and maintenance of an airfield designated Otis Air Force Base. From 1954-74, Camp Edwards continued to function under the U.S. Army as a reserve training center under a permit from the U.S. Air Force. In 1973, base closures caused the Air Force to transfer Otis Air Force Base to the Massachusetts Air National Guard. The U.S. Coast Guard was issued a lease for portions of the installations, from the Commonwealth of Massachusetts in 1976. In 1979, the U.S. Army licensed its area at Camp Edwards to the Massachusetts Army National Guard. The World War II temporary structures under consideration in this report are presently under the control of the U.S. Army and the Massachusetts Army National Guard.<sup>7</sup>
- 4. Builder, contractor, suppliers: Building T-1369 was part of Block 13 of the Camp Edwards cantonment. The Walsh Construction Company of Davenport, Iowa, was the builder/ contractor. The contracts for the principal construction areas were fixed-fee. Cost estimates were prepared which itemized costs for each structure type, complete with utilities and the contractors' fees. The War Department purchased the lumber used in Building T-1369 using a bid system. The lumber was inspected independently by the Lumber Inspection Bureau Inc. Concrete was purchased from the Crystal Concrete Company of Braintree, Massachusetts, and the F.V. Lawrence Plant in Falmouth, Massachusetts. Test engineers were employed through the firm of Thompson and Litchfield Company of Boston. Information on individual suppliers of other materials was not available. These were probably purchased from subcontractors in the area.
- 5. Original Plans and Construction: Building T-1369 was built from 700-series plan no. 700-314, and associated plans. The original plan used to construct Building T-1369 is currently on file in the Facilities Engineers Office at Camp Edwards, Massachusetts. The original cost of the building was estimated at \$11,913.21. No alterations to the original building plan were noted at the time of construction.
- 6. Alterations and additions: The exterior of the structure has been modified to accommodate new electrically operated overhead doors in place of the original hinge doors. Aluminum storm windows and gutters have been added. A shed and covered entry have been added to the structure's rear. Screen openings in the interior ceiling have been covered, and the tool check-out window has been removed. The original north bay area has been converted to office space. The original luminaires have been replaced by fluorescent fixtures.

# CAMP EDWARDS, BUILDING T-1369 (MOTOR REPAIR SHOP) HABS NO. MA-1290-I (page 3)

#### B. Historical Context:

The construction of Building T-1369 was part of a massive, nation-wide mobilization program designed to build cantonments to house and train the expanded World War II Army. The 700 Series, and the 800 Series that followed, was a comprehensive set of drawings which could be used interchangeably in creating the various building types. Through the construction of temporary wood-frame buildings such as T-1242, the 1939 housing capacity of 200,000 was increased to 6,000,000 by the close of the mobilization program in the fall of 1944. Camp Edwards was the first of the mobilization camps constructed. The plans were so successful that fifty sets of duplicate prints were commissioned for use by other camp builders. In addition, war mobilization buildings are significant for their construction and technological innovation. Techniques such as the standardization of plans, prefabrication of units and assembly-line approach to construction were largely developed in the construction of these mobilization structures.

Building T-1369 is a 700-series Motor Repair Shop constructed in the main cantonment area of Camp Edwards, built by the War Department in the fall and winter of 1940. Mobilization cantonments were constructed to house and serve as training bases for approximately 525,000 men drafted for Army service after the declaration of war.

The post was named in honor of Maj. Gen. Clarence Edwards, World War I commander of the 26th Infantry Division. The camp was leased by the Department of the Army in 1940 and developed into a division training area. It was here that the famous "Yankee Division" of the 26th Infantry was first assembled and trained for overseas duty in Europe and the South Pacific.

When fully occupied, over 30,000 people lived in the cantonment area. The main cantonment area was organized as a square with a total of twenty-nine regimental blocks for the infantry and artillery units. Outside the main cantonment, additional blocks were constructed for the hospital, logistics, quartermaster depots, "colored" infantry, and service commands

Building T-1369 illustrates the setting of one of the World War II cantonment logistics areas. The original large open-bay area, the unfinished flooring and walls, and the purely functional heating, ventilation, electrical systems, illustrate the utilitarian function of this structure, made necessary by the massive nation-wide mobilization effort.

#### PART II. ARCHITECTURAL INFORMATION:

#### A. General Statement:

1. Architectural Character: Building T-1369 is a typical 700-series, Motor Repair Shop. The structure was built according to standard War Department plans and is an example of World War II mobilization construction. Camp Edwards was the first of the mobilization camps constructed and, therefore, was a prototype for plans used nation-wide. The plans-as revised by the architect-engineers--were

## CAMP EDWARDS, BUILDING T-1369 (MOTOR REPAIR SHOP) HABS NO. MA-1290-L (page 4)

1249-I

so successful that fifty sets of duplicate prints were commissioned for use by other camp builders.<sup>13</sup>

2. Condition of Fabric: The general condition of Building T-1369 at the time of inspection was good. The structural members are in good condition and the flooring is serviceable. The exterior sheathing is not maintained and shows rot and other damage from weather. The roof appears in good condition.

#### B. Description of the Exterior:

- 1. Overall dimensions: Building T-1369 is a rectangular building to which two leantos have been added. There are three original personnel entries. The main structure measures 84'-0" long x 37'-0" wide. The north lean-to is 12'-0" wide x 39'-0" long. The south lean-to is 20'-0" wide x 39'-0" long. The height from grade to the roof ridge is approximately 20'. 14
- 2. Foundations: Building T-1369 rests on an on-grade slab. The structure has copper termite shields between the foundation and siding.<sup>15</sup>
- 3. Walls: The exterior walls of Building T-1369 consist of three layers: wooden sheathing laid diagonally, black construction paper, and horizontal interlocking wooden lap siding, the standard system used throughout the cantonment<sup>16</sup>.
- 4. Structural system, framing: Building T-1369 is of frame, platform construction. The structure has a gable roof with a 5 to 12 slope and is covered with 3-tab asphalt shingles with gray aggregate.
- 5. Porches, stoops: The structure is predominately at grade, raised only slightly to facilitate drainage.
- 6. Chimneys: The original chimney and metal stack remain, the brickwork is laid in American Bond (7:1).

#### 7. Openings:

- a. Doorways and doors: The design of all original exterior doors at Building T-1369 is similar, consisting of wooden five-panel doors. There are two entries each, on the west front and east rear, one enters into the work area and one, to the tool room. A four-over-three-light double door with recessed panels provides access to the furnace room. Two large aluminum overhead-roll doors have replaced the original hinged vehicle access doors.
- b. Windows: The windows are six-over-six-light, double-hung sash. On the north and east wall, are two such windows; and on south, are four. Security mesh is installed on those windows accessing the tool room.

# CAMP EDWARDS, BUILDING T-1369 (MOTOR REPAIR SHOP) HABS NO. MA-1290-L (page 5)

#### 8. Roof:

a. Shape, covering: Building T-1369 is covered by a gabled roof with a slope of 5 to 12. Roofing materials consist of 3-tab asphalt shingles with gray aggregate laid on 1"-thick sheathing, supported by 2" x 8" rafters at 2'-0" on center.

#### C. Description of the Interior:

- 1. Floor Plans:
  - a. Basement: None.
  - b. Main Floor: Building T-1369, as constructed in 1940, had a gross area of 3,456 square feet. The main area contains the vehicle workshop, office, store room, and heater room. The original heater has been removed, and the heater room and store room have been joined and turned into additional office space.
  - c. Attic: The attic contains the roof trusses and served primarily to enhance ventilation. The attic area was not accessible.
- 2. Stairways: There is a surface-mounted ladder to a second-floor storage space above the office areas.
- 3. Flooring: The flooring is slab on grade. The tool room has been covered with a resilient flooring. There is striping painted on the floors to delineate traffic patterns.
- 4. Wall and Ceiling finishes: The walls are covered with sheet rock, and painted gray and white. The ceiling in the workshop is covered with the original fiber board and remains unpainted. The office areas have had suspended acoustic-tile ceilings installed. The original plans call for a ceiling in the workshop, only in the northern Zone, and for a ceiling in the office and store room areas in both the northern and southern Zones.

### 5. Openings:

- a. Doorways and Doors: One original five-panel door remains at the bathroom entry. The doorways do not have decorative surrounds.
- b. Windows: There is a pass-through tool window between the maintenance bay and the tool room. The windows do not have decorative surrounds.
- 6. Decorative Trim: Due to the austere nature of the construction there was no decorative trim.

## CAMP EDWARDS, BUILDING T-1369 (MOTOR REPAIR SHOP) HABS NO. MA-1<del>290-1</del> (page 6)

1249-I

- 7. Hardware: The original knob and lock sets in some of the exterior doors and the window bolt-latches are present. The doors have butt hinges. Many of the original switch plates are still in place.
- 8. Mechanical Equipment:
  - a. Heating: The original Lennox "Torrid Zone" coal-fired furnace has been removed and replaced by ceiling-hung gas-fired blowers.
  - b. Ventilation: The structure is vented through ceiling ducts. The original return-air vent is present in the ceiling. Three metal rooftop ventilators vent the attic space.
  - c. Lighting: Some of the original green and white porcelain-enameled fixtures are present in the structure's interior. The remaining interior lighting has been supplemented by fluorescent fixtures and task lighting.
  - d. Plumbing: All the present plumbing appears to be later additions and is contained in the lean-to which houses the washroom. The one probable exception is that of an American Standard Radiator & Sanitary Co, No. 2 Type sink dated 12-4-40.

#### D. Site:

- General Setting and orientation: Building T-1369 and the other buildings of Block 13 are located within the south quarter of the square cantonment area. The building is located within a fenced and paved compound containing vehicles, and outbuildings.<sup>17</sup>
- Historical Landscape Design: To the west, asphalt walkways and roadways serve
  as access for pedestrians and motorized traffic. The remainder of the building lot
  is paved and fenced.

### PART III. SOURCES OF INFORMATION

- A. Architectural Drawings: Building T-1369 was built from 700-series plan number 700-314, and supplemented with associated plan number 700-314.1. The original plan (Drawing 700-314) used to construct Building T-1369 is currently on file in the Facilities Engineers Office at Camp Edwards, Massachusetts. Duplicates of the 700-series plan are currently on file at the United States Army Construction Engineering Research Laboratory (USA-CERL).
- B. Early Views: No construction photographs of Building T-1369 were located. General camp construction photographs were located at the Office of History, Fort Belvoir, Virginia.

## CAMP EDWARDS, BUILDING T-1369 (MOTOR REPAIR SHOP) HABS NO. MA-1299-I (page 7)

1249-I

### C. Bibliography:

### 1. Primary and unpublished sources:

Standard Mobilization Drawings 700-Series Plan numbers 700-314 and 700-314.1.

Real Property Records. Building and Structures, Facilities Engineers Building, Camp Edwards, Massachusetts.

Base Layout Plan, Otis Air National Guard, Camp Edwards, U.S. Coast Guard, Scale 1:400, revised January 1983, Camp Edwards Facilities Engineers Office.

Report on the Activities of the Construction Division. War Department, Office of the Quartermaster General, Construction Division, July 1, 1940 to November 1, 1941, pp. 148-49. Manuscript on file Office of the Corps of Engineers, Engineer Historical Division, Fort Belvoir, Va.

Architect-Engineer's Report on Camp Edwards, Falmouth, Massachusetts. June 4, 1941. Charles T. Main Inc. Engineers. Manuscript on file, Facilities Engineers Building, Camp Edwards, Massachusetts.

Camp Edwards Military Reservation, Bourne, Massachusetts. Master Plan, January 1984, Revised February 1985. Massachusetts Army National Guard, Directorate of Facilities Engineering, Boston, Massachusetts.

Camp Edwards, Falmouth Massachusetts, Walsh Construction Co., General Contractors. Estimated Cost As of September 5, 1940 For Motor Repair Shop-Type SP-2 Drawing No. 700-314. pg. 36, from Construction Costs Report, on file Facilities Engineers Building Camp Edwards, Massachusetts.

Letter dated August 13, 1956 from D.G. Aronberg of the Walsh Construction Company to Mr. August G. Sperl concerning a review of Lenore Fine and Jesse A. Remington's, *The Corps of Engineers: Construction in the United States*. United States Army in World War II, The Technical Services. Center of Military History. Office of the Chief of Military History, United States Army, Washington, D.C., 1972.

#### 2. Secondary and Published sources:

Lenore Fine and Jesse Remington. The Corps of Engineers: Construction in the United States. United States Army in World War II, The Technical Services. Center of Military History. Office of the Chief of Military History, United States Army, Washington, D.C., 1972.

K. Alan Snyder. A Guide to Archival Sources for the Study of World War II Temporary Buildings. Office of the Corps of Engineers, History Division, Washington, D.C., 1988.

## CAMP EDWARDS, BUILDING T-1369 (MOTOR REPAIR SHOP) HABS NO. MA-1290-1 (page 8)

1249-I

Diane Wasch and Perry Bush. The Historical Context of World War II Mobilization Construction. Draft Document, National Park Service Historic American Buildings Survey, Washington, DC., 1989.

#### D. Likely Sources Not Investigated:

- 1. Documentary: Additional information on the firms of Charles T. Main and the Walsh Construction Company may be available. Additional data may be available in the National Archives on Col. Charles D. Hartman and his staff who produced and revised the 700-series Standard Drawings.
- Oral History: Interviews could be conducted with personnel involved in the
  construction at Camp Edwards and the military records and local area could be
  searched for civilian and military personnel who may have worked at the
  installation.

Prepared by: Keith Landreth, Richard Hayes, Daniel R. Lapp, James Bowman,

and Steve Turner

United States Army Construction Engineering Research

Laboratory August 1990

#### PART IV. PROJECT INFORMATION:

The documentation of Camp Edwards, Massachusetts, was undertaken as mitigation documentation by the United States Army, Construction Engineering Research Laboratory (USACERL), Champaign, Illinois. The documentation was done to the standards of the Historic American Building Survey/Historic American Engineering Record (HABS/HAER), Robert J. Kapsch, Chief, the National Park Service. The research was underaken by Keith Landreth, Daniel R. Lapp, James Bowman, and Steve Turner of USACERL on site at Camp Edwards during the summer of 1990. The large-format photography was done by Martin Stupich.

#### NOTES:

<sup>1.</sup> Base Layout Plan, Otis Air National Guard, Camp Edwards, U.S. Coast Guard, Scale 1:400, revised January 1983, Camp Edwards Facilities Engineers Office.

<sup>2.</sup> Camp Edwards, Falmouth Massachusetts, Walsh Construction Co., General Contractors. Estimated Cost As Of September 5, 1940 For Motor Vehicle Repair Shop Type SP-2 Drawing No. 700-314. p. 36. from Construction Costs Report, on file Facilities Engineers Building, Camp Edwards, Massachusetts.

<sup>3.</sup> Report on the Activities of the Construction Division. War Department, Office of the Quartermaster General, Construction Division, July 1, 1940 to November 1, 1941, p.148-149. Manuscript on file Office of the Corps of Engineers, Engineer Historical Division, Fort Belvoir, Va.

# CAMP EDWARDS, BUILDING T-1369 (MOTOR REPAIR SHOP) HABS NO. MA-1290+ (page 9) 24/Q-I

- 4. Lenoir Fine and Jesse Remington. The Corps of Engineers: Construction in the United States. United States Army in World War II, The Technical Services. Center of Military History. Office of the Chief of Military History, United States Army, Washington, D.C. (1972) pg. 69.
- 5. Architect-Engineer's Report on Camp Edwards, Falmouth, Massachusetts. June 4, 1941. Charles T. Main Inc. Engineers. p. 7. Manuscript on file, Facilities Engineers Building, Camp Edwards, Massachusetts.
- 6. Report on the Activities of the Construction Division. War Department, Office of the Quartermaster General, Construction Division, July 1, 1940 to November 1, 1941, p.148-149. Manuscript on file Office of the Corps of Engineers, Engineer Historical Division, Fort Belvoir, Va.
- 7. Camp Edwards Military Reservation, Bourne, Massachusetts. Master Plan, January 1984, Revised February 1985. Massachusetts Army National Guard, Directorate of Facilities Engineering, Boston, Massachusetts.
- 8. Architects-Engineer's Report on Camp Edwards, Falmouth, Massachusetts. June 4, 1941. pg. 9, Charles T. Main Inc. Engineers. Manuscript on file, Facilities Engineers Building, Camp Edwards, Massachusetts.
- 9. Architect-Engineer's Report on Camp Edwards, Falmouth, Massachusetts. June 4, 1941, Charles T. Main Inc. Engineers, Manuscript on file, Facilities Engineers Building, Camp Edwards, Massachusetts., p.83 and 90.
- 10. A minor discrepancy exist between the Walsh Construction report and the Camp Edwards Real Property records in regard to the structure drawing numbers. The Real Property records note the structure as having been constructed with plan 700-378 (Day Room Type A-5), however these plans are for a much smaller structure type (see report on Building T-1267 this report.) The Walsh report states correctly that the plan number used was 700-310 (Recreation Building Type RB-1).
- 11. Camp Edwards, Falmouth Massachusetts, Walsh Construction Co., General Contractors. Estimated Cost As Of September 5, 1940 For Motor Repair Shop Type RB-1 Drawing No. 700-314. p.36 from Construction Costs Report, on file Facilities Engineers Building, Camp Edwards, Massachusetts.
- 12. Letter dated August 13, 1956 from D.G. Aronberg of the Walsh Construction Company to Mr. August G. Sperl concerning a review of Lenore Fine and Jesse A. Remington's, *The Corps of Engineers: Construction in the United States*. United States Army in World War II, The Technical Services. Center of Military History. Office of the Chief of Military History, United States Army, Washington, D.C. (1972).
- 13. Letter dated August 13, 1956 from D.G. Aronberg of the Walsh Construction Company to Mr. August G. Sperl concerning a review of Lenore Fine and Jesse A. Remington's, *The Corps of Engineers: Construction in the United States*. United States Army in World War II, The Technical Services. Center of Military History. Office of the Chief of Military History, United States Army, Washington, D.C. (1972)
- 14. From "Standard 700 Series Drawing 314". Verified during field inspection.
- 15. From "Standard 700 Series Drawing 1163" entitled "Standard Details, Termite Shields"
- 16. This differs from Drawing 700-314 specifications which call for vertical board and batten siding.
- 17. Base Layout Plan, Otis Air National Guard, Camp Edwards, U.S. Coast Guard, Scale 1:400, revised January 1983, Camp Edwards Facilities Engineers Office.